

## State of Utah

OLENE S. WALKER
Governor

GAYLE McKEACHNIE
Lieutenant Governor

Administrative Services S. CAMILLE ANTHONY Executive Director

Purchasing and General Services DOUGLAS RICHINS Division Director

December 7, 2004

\*\*\*ADDENDUM\*\*\*ADDENDUM\*\*\*ADDENDUM\*\*\*

SOLICITATION: PM5042AD1 DUE DATE: 12/21/2004 TIME: 2:00 P.M.

**DESCRIPTION: SALT STORAGE BUILDINGS - PAROWAN UTAH** 

#### **ADDENDUM #1**

### Please note the following:

Please add the following section to the specifications. It was inadvertently left out.

SPECIAL CONSTRUCTION - FABRIC ARCH SYSTEM

**GENERAL** 

#### SECTION REQUIREMENTS

Engineer, design, fabricate and erect a complete single span, truss arch fabric covered steel framed building system to withstand loads from winds, gravity, structural movement including movement thermally induced, and to resist in-service use conditions that the building will experience, including exposure to the weather, without failure. System to include 1 end wall assembly.

Submit Product Data and Shop Drawings.

Warrantee fabric for fifteen years. Warrantee entire system for five years.

**PRODUCTS** 

Product shall be by Cover-All or approved equal.

**MATERIALS** 

Steel tubing cross members and back wall framing members shall comply with ASTM 500, Grade B, ASTM A501 or ASTM A53. Provide triple coat exterior finish with interior corrosion resistance coating.

Steel members fabricated from plate or bar stock shall be 42 ksi minimum yield strength and comply with ASTM A529, ASTM A570, or ASTM A572.

Bolts shall be ASTM A307 or A325.

Fabric cover shall be woven high density polyethylene tape with double stack weave, finish coated both sides.





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Cover fastening system shall be compatible with cover fabric and include zero stretch belting, welded fabric pockets and 10,000 lb capacity lashing winches.

#### **EXECUTION**

#### **FABRICATION**

Fabricate components in such a manner that once assembled, they may be disassembled, repackaged and reassembled with a minimum amount of labor.

Shop-fabricate framing components to indicated size and section with base plates, bearing plates, and other plates required for erection, welded in place. Provide holes for anchoring or connections shop-drilled or punched to template dimensions.

#### **ERECTION**

Framing: Erect framing true to line, level, plumb, rigid, and secure. Level base plates to a true even plane with full bearing to supporting structures, set with galvanized anchor bolts.

Provide diagonal rod or angle bracing in roof and sidewalls as indicated. Movement-resisting frames may be used in lieu of sidewall rod bracing, to suit manufacturer's standards

Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to building structural frame.

Arrange and nest any lap joints so prevailing winds blow over, not into, lapped joints. Apply fabric and associated fastening system for neat and weather tight enclosure. Protect factory finishes form damage.

Install louvers and any accessories in accordance with manufacturer's recommendations for positive anchorage to building and weather tight mounting.

2. Attached is a copy of the General Notes which may prove more legible.

Signature	 Date	
Name	Company	
give written acknowledgement with the	s, either include a copy of addendum with bid sub e proposal. It shall be the responsibility of the re tion to all concerned prior to the assigned due da	espondent to
*********END (	OF ADDENDUM************************************	*****
3 DUE DATE REMAINS UNCHA	NGED	



THESE NOTES ARE GENERAL AND APPLY TO THE ENTIRE PRO-JECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO

APPLICABLE SPECIFICATIONS AND CODES DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT CODE ADOPTED BY THE STATE OF UTAH. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.

ALTERNATIVE DESIGNS THE STRUCTURAL SYSTEMS AND DETAILS ON THESE PLANS ARE THE PRIORITY DESIGN. CONTRACTOR MAY USE ALTERNATE DESIGN UPON APPROVAL.

STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

CONSTRUCTION LOADS STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL SUPPORTS, ON COMPLETED STRUCTURES. DURING CONSTRUCTION STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE LOADS MAY OCCUR

DESIGN LIVE LOADS

A. ROOF: 43 PSF SNOW + DRIFT

70 MPH, EXPOSURE "C"

C. SEISMIC: PER CODE

REFERENCE ELEVATIONS ALL ELEVATIONS SHOWN ON STRUCTURAL DRAWINGS ARE REFERENCED FROM A FINISHED FLOOR ELEVATION

FOUNDATION DESIGN FOR STRUCTURES IS BASED UPON CODE ALLOWABLE FOUNDATION AND LATERAL PRESSURE

GEOTECHNICAL A. ALLOWABLE SOIL BEARING PRESSURE: 1,500 PSF

B. PASSIVE LATERAL EARTH PRESSURE:

100 PSF/FT

CONTRACTOR TO PROVIDE VERIFICATION OF ASSUMED SOIL BEARING CAPACITY ASSUMED

USE OF HEAVY TRACTOR-TOWED ROLLER COMPACTION EQUIPMENT WILL NOT BE ALLOWED WITHIN 5 FEET OF WALLS

#### CONCRETE

APPLICABLE CODE CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

REINFORCING STEEL DETAILS ALL DETAILING, FABRICATION, AND ERECTION OF REINFORC-ING BARS, UNLESS OTHERWISE NOTED SHALL BE IN ACCORD-ANCE WITH MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI-315), LATEST EDITION.

DESIGN STRENGTHS

A. COMPRESSIVE STRENGTH (28 DAY): ECOTINGS

f'c = 3,000 PSIf'c = 4,000 PSI

#4 AND LARGER #3 8. REINFORCING:

GRADE 60 GRADE 40

CONCRETE COVER

CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS WITH MINIMUM COVER OF ONE BAR DIAMETER, UNO:

- A. CONCRETE CAST AGAINST EARTH 3 INCHES.
- B. CONCRETE TO BE IN CONTACT WITH EARTH OR WEATHER.
  - BARS GREATER THAN #5 2 INCHES.
     BARS #5 OR LESS 1-1/2 INCHES.
- C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER.
  - 1. SLABS, WALLS 1 INCH.
  - 2. BEAMS, COLUMNS (PRIMARY REINF, TIES, STIRRUPS, SPIRALS) 1 1/2 INCHES.
- BAR LAP SPLICES AND EMBEDMENT LENGTH DOWELS SHALL BE THE SAME SIZE AND SPACING AS BARS WITH WHICH THEY ARE LAPPED UNLESS OTHERWISE NOTED. ALL BAR SPLICES SHALL BE LAPPED, OR EMBEDDED, AS FOLLOWS UNLESS OTHERWISE NOTED

GRADE 40 OR 60		,							
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#1
REGULAR BARS	24	24	24	34	46	60	76	97	119
TOP BARS	24	26	31	44	59	78	99	126	154

TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CAST IN A SINGLE POUR BELOW THE BAR. ADD 25% TO ALL LAP SPLICES FOR BAR SPACING LESS THAN 6"

BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF TABLE 1 OF ACI-315.

#### ALUMINUM

ALUMINUM IN CONTACT WITH CONCRETE WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY SURFACES, CONTACT SURFACES SHALL BE COATED WITH HEAVY ALKALI-RESISTANT BITUMINOUS PAINT.

### STEEL

APPLICABLE CODE

STEEL CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS AND STANDARDS PRESENTED IN THE 9TH EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.

ST2. MATERIAL

STRUCTURAL STEEL SHALL BE AS SPECIFIED ANCHOR BOLTS, SHALL BE ASTM A307.

ST3. WELDING

WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH AISC AND AWS CODES FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION.

ST4. SPECIAL INSPECTION

SPECIAL INSPECTION AS REQUIRED BY CODE